

## **APPENDIX**

**Green Building Definitions**

**Recycled Materials/Products Websites**

**Other Related Websites**

## **GREEN BUILDING DEFINITIONS:**

A Green Building:	Optimizes efficiencies in resource management and operational performance; minimizes risk to human health and the environment.
Bio-based Product:	A commercial or industrial product (other than food or feed) that is produced from biological products or renewable domestic agricultural (plant, animal, and marine) or forestry materials.
Environmental Management Systems:	The part of an overall management system that includes organizational structure, planning activities, responsibilities, practices, procedures, processes and resources for developing, implementing, achieving, reviewing and maintaining the environmental policy.
Environmentally Preferable:	Products or services that have less undesirable impact on human health and the environment than competing products or services which serve the same purpose. This comparison may consider acquisition of raw materials, production, manufacturing, packaging, distribution, reuse, operation, maintenance or disposal of the product or service.
Environmentally Responsible Materials:	Products manufactured with highly efficient non-toxic processes creating low-embodied-energy products and materials while maintaining durability and strength.
Hazardous Materials:	Existing or new materials exhibiting ignitability, corrosivity, toxicity or reactivity characteristics which create or cause environmental or health hazards, and requiring specific disposal procedures.
High Efficiency Equipment:	Equipment and distribution systems that produce fewer pollutants and offer both economic and environmental advantages over their conventional counterparts.
Life Cycle Cost:	The amortized annual cost of a product, including capital costs, installation costs, operating costs, maintenance costs and disposal costs spread across the lifetime of the product.
Life Cycle Assessment:	The comprehensive examination of a product's environmental and economic aspects and potential impacts throughout its lifetime, including raw material extraction, transportation, manufacturing, use and disposal.
Locally Produced:	When feasible, specify use of Indiana based manufacturers of recycled products and materials to promote the recycling industry within our State and to save transportation costs and energy use.
Low-Embodied Energy:	Materials and/ or products manufactured with lower energy demand processes. Heavily processed or manufactured products are more energy intense and wasteful. As long as performance and durability isn't sacrificed, select low-embodied-energy materials.
Off-gassing V.O.C.:	Chemical compounds common in and emitted by building products exposed to the air over time can contribute to the formation of smog, can affect workers and occupants health, and contribute to ground level pollution.
Pollution Prevention:	Practices that reduce or eliminate the creation of pollutants through increased efficiency in the use of raw materials, energy, water or other resources; or protection of natural resources by conservation.

Recycled Content:	Building materials or products manufactured which contain recycled materials. The percentage of recycled content varies considerably according to type of product and manufacturer.
Reduced Energy Use Technologies:	Equipment, appliances and/ or furnishings manufactured utilizing highly efficient energy consumption systems resulting in overall less pollutants during operation.
Renewable Energy Sources:	Energy created or derived from materials or fuels, which are regenerative or recurring. (Passive solar, daylighting, natural cooling, and photovoltaics)
Resource Reduction:	Minimizing the number of suppliers or distributors supplying materials and products reduces transportation expense and energy use.
Site Resource Evaluation:	Identification of natural site characteristics and amenities that shall be used to guide or enhance project design development. (Solar access, sun orientation, soils, vegetation, water resources, etc.)
Sustainability Terminology:	As defined in ASTM E2114-00a – Standard Terminology for Sustainability relative to the performance of buildings. Available from ASTM (American Society for Testing and Materials): Internet: <a href="http://www.astm.org">www.astm.org</a>
Sustainable Design:	Optimizing the use of space through design to minimize resource use during construction and during the operations life cycle.
Waste Reduction:	Preventing or decreasing the amount of waste being generated. Techniques include waste prevention, recycling and purchasing recycled and environmentally preferable products.
Water Efficient Fixtures:	Specify water-conserving toilets, showerheads, faucet aerators, reduce hot water usage and minimize demand on sewer treatment plants and septic systems.

#### **Recycled Materials/Products Websites** (in order of perceived usefulness)

[www.buildinggreen.com/products/productlist.html](http://www.buildinggreen.com/products/productlist.html) – Environmental Building News, product reviews.

[www.state.in.us/doc/energy/recycle\\_productlist.html](http://www.state.in.us/doc/energy/recycle_productlist.html) – Indiana Department of Commerce, listing of recycled products.

[www.terragreenceramics.com](http://www.terragreenceramics.com) – Indiana porcelain tile of recycled glass.

[www.wabashvalley.com](http://www.wabashvalley.com) – Indiana mfr. Includes recycled content.

[www.cimmb.ca.gov/rcp](http://www.cimmb.ca.gov/rcp) – Listing of products by California integrated Waste Management.

<http://brba.nrc-recycle.org/Buyers.htm> – Buy Recycled Business Alliance; download .pdf version.

Various Internet search engines – Can utilize complete listing at: [www.loc.gov/global/explore.html](http://www.loc.gov/global/explore.html) (library of Congress).

#### **Websites Oriented to Green Buildings and Sustainable Design.**

[www.energystar.gov](http://www.energystar.gov) – Energy Star Building Program; U.S. Environmental Protection Agency (EPA)

[www.eren.doe.gov/buildings/technology\\_roadmaps](http://www.eren.doe.gov/buildings/technology_roadmaps) – U.S. Department of Energy: Office of Building Technology, State and Local Programs.

[www.wbdg.org](http://www.wbdg.org) – Whole Building Design Guide (Federal)

[www.advancedbuildings.org](http://www.advancedbuildings.org) – Advanced Building Technologies and Practices.

<http://www1.arch.hku.hk/research/BEER/ststain.htm> – Sustainable Architecture and Building Design (vast site of references).

[www.pnl.gov/doe](http://www.pnl.gov/doe) sustainable design – (download roadmap .pdf) – U.S. Department of Energy, Pacific Northwest Laboratory.

[www.Tjcog.dst.nc.us/hyprlink.htm](http://www.Tjcog.dst.nc.us/hyprlink.htm) – Triangle Council of Governments, N.C. – list of websites related to sustainable design.

<http://eetd.lbl.gov> – Lawrence Berkeley National Laboratory, Environmental Energy Technologies Division

[www.smartarch.nl](http://www.smartarch.nl) – Internet site for international sources.

[www.eeba.org/sites/green.htm](http://www.eeba.org/sites/green.htm) – Energy and Environmental Building Association and links to various sites.

[www.e-architect.com/pia/cote/houe.asp](http://www.e-architect.com/pia/cote/houe.asp) – American Institute of Architects, Committee and the Environment.

[www.greendesign.net/gbrc/index.html](http://www.greendesign.net/gbrc/index.html) – Green Building Resource Center – click on Web Resources- extensive.

[www.advancedbuildings.org](http://www.advancedbuildings.org) – Extensive Canadian site.

[www.energy.WSU.edu/index/building.cfm](http://www.energy.WSU.edu/index/building.cfm) – Washington State University references site.